

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

ASTELLAS INSTITUTE FOR
REGENERATIVE MEDICINE,

Plaintiff,

v.

IMSTEM BIOTECHNOLOGY, INC., *et al.*,

Defendants.

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Civil Action No. 17-cv-12239-ADB

**MEMORANDUM AND ORDER ON ASTELLAS’ MOTION FOR ENTRY OF
JUDGMENT AND ADDITIONAL FINDINGS AND CONCLUSIONS**

BURROUGHS, D.J.

Plaintiff Astellas Institute for Regenerative Medicine (“Astellas”) brought this action against Defendants ImStem Biotechnology, Inc. (“ImStem”), Dr. Xiaofang Wang, and Dr. Ren-He Xu (collectively, “Defendants”), alleging claims for correction of inventorship of a patent under 35 U.S.C. § 256 and unfair trade practices under Massachusetts General Laws Chapter 93A (“Chapter 93A”). [ECF No. 113]. Defendants responded with counterclaims for correction of inventorship of two patents under 35 U.S.C. § 256. [ECF No. 91]. On February 5, 2021, after a nearly two-and-a-half-week bench trial, this Court entered its findings of fact and conclusions of law. [ECF No. 255]. Astellas now moves for an entry of judgment and additional findings of fact and conclusions of law regarding its Chapter 93A claim. [ECF No. 261]. For the reasons set forth below, Astellas’ motion is GRANTED in part and DENIED in part.

I. BACKGROUND

The Court presumes the parties’ familiarity with the underlying facts, which are detailed in the Court’s findings of fact and conclusions of law. [ECF No. 255]. In sum, the parties’

dispute centered around correcting the inventorship of U.S. Patent No. 9,745,551 (the “’551 patent”), U.S. Patent No. 8,961,956 (the “’956 patent”), and U.S. Patent No. 8,962,321 (the “’321 patent”), as well as Astellas’ claims under Chapter 93A. At the summary judgment stage, the Court ruled that Drs. Erin Kimbrel and Robert Lanza, two scientists associated with Astellas, should be added as inventors to the ’551 patent, which was owned by ImStem and originally only listed Drs. Wang and Xu as co-inventors. [ECF No. 163 at 20]. At trial, Defendants requested that Drs. Wang and Xu be added as inventors to the ’321 patent and that Dr. Wang be added to the ’956 patent, which are both owned by Astellas. [ECF No. 255 at 36, 38–39]. Astellas in turn wanted Drs. Wang and Xu removed from the ’551 patent because they did not make any inventive contribution to that patent and also sought damages for the allegedly unfair and deceptive practices engaged in by Defendants. [ECF No. 255 at 38–39, 43, 45]. Prior to trial, the parties stipulated that inventorship on another patent, U.S. Patent No. 10,557,122 (the “’122 patent”), would be aligned to match the inventorship determination for the ’551 patent. [ECF No. 255 at 39 n.17].

After summarizing the evidence before it, the Court ultimately concluded that

Dr. Wang will not be added to Astellas’ ’321 or ’956 patents and Dr. Xu will not be added to the ’321 patent because they did not make inventive contributions to the patents. In addition, Drs. Wang and Xu will be removed from the ’551 patent for failing to make inventive contributions to that patent, and, by stipulation, the ’122 patent will be amended to conform with this determination. Lastly, Astellas has failed to show that Defendants violated Chapter 93A. Judgment shall therefore enter for Astellas on [the correction of inventorship claims and counterclaims]. Judgment shall enter for Defendants on [the Chapter 93A claim].

[ECF No. 255 at 48].

On April 21, 2021, Astellas filed its motion for entry of proposed judgment and additional findings and conclusions concerning Chapter 93A, [ECF No. 261], which Defendants partially opposed on May 19, 2021, [ECF No. 265]. Astellas then filed a reply in support of its

motion, [ECF No. 268], and Defendants filed a sur-reply, [ECF No. 272]. The parties also filed supplemental letters after briefing on the motion was complete. [ECF Nos. 274, 275, 276].

II. LEGAL STANDARD

Astellas moves for an entry of final judgment and additional findings of fact and conclusions of law pursuant to Federal Rules of Civil Procedure 52(b) and 58. [ECF No. 261 at 1]. Under Rule 58(d), “[a] party may request that judgment be set out in a separate document as required” under the rules. Fed. R. Civ. Pro. 58(d). Rule 52(b) states that “[o]n a party’s motion filed no later than 28 days after the entry of judgment, the court may amend its findings—or make additional findings—and may amend the judgment accordingly.” Fed. R. Civ. Pro. 52(b). The purpose of Rule 52(b) “is to permit the correction of any manifest errors of law or fact that are discovered, upon reconsideration, by the trial court” and should not be a mechanism for “parties to rehash old arguments already considered and rejected by the trial court.” Nat’l Metal Finishing Co. v. BarclaysAmerican/Commercial, Inc., 899 F.2d 119, 123 (1st Cir. 1990). A Rule 52(b) motion is also not a vehicle “to introduce evidence that was available at trial but was not proffered, to relitigate old issues, to advance new theories, or to secure a rehearing on the merits.” Valentín Marrero v. Puerto Rico, No. 18-cv-01286, 2020 WL 5992019, at *2 (D.P.R. Oct. 9, 2020) (quoting In re Mayaguez Advanced Radiotherapy Ctr., No. 09-bk-04540, 2012 WL 2119107 at *1 (Bankr. D.P.R. 2012)); Hartford Roman Cath. Diocesan, Corp. v. Interstate Fire & Cas. Co., No. 12-cv-01641, 2017 WL 3172536, at *2 (D. Conn. July 26, 2017), aff’d, 905 F.3d 84 (2d Cir. 2018) (finding that Rule 52 “is [not] intended to provide a party with the opportunity to merely relitigate matters or present the case under new theories”); see also Feliciano-Hernandez v. Pereira-Castillo, 663 F.3d 527, 537 (1st Cir. 2011) (explaining in context of Rule 59 motion for new trial, which is closely related to Rule 52 motion, “[a] motion to reconsider

should not raise arguments which could, and should, have been made before judgment issued”) (internal quotations and citations omitted). “Except for motions to amend based on newly discovered evidence, the trial court is only required to amend its findings of fact based on evidence contained in the record” and “[t]o do otherwise would defeat the compelling interest in the finality of litigation.” Fontenot v. Mesa Petroleum Co., 791 F.2d 1207, 1219 (5th Cir. 1986) (citation omitted); see also U.S. Gypsum Co. v. Schiavo Bros., Inc., 668 F.2d 172, 180 (3d Cir. 1981) (“[T]he trial record must support whatever additional findings of fact or conclusions of law a party seeks under Rule 52(b) or it is certainly not entitled to them.”), cert. denied, 456 U.S. 961 (1982).

III. DISCUSSION

Astellas seeks a final judgment that corrects the inventorship of the ’551 and ’122 patents, transfers ownership of the ’551 and ’122 patents, corrects the inventorship and transfers ownership of additional foreign and domestic patents and applications, and orders equitable relief under Chapter 93A. [ECF Nos. 261-1, 262].

A. Inventorship of the ’551 and ’122 Patents

Astellas asks the Court to enter a judgment (1) ordering the Director of the U.S. Patent and Trademark Office to add Drs. Kimbrel and Lanza and remove Drs. Xu and Wang from the ’551 and ’122 patents; and (2) directing Defendants to cooperate with Astellas to effectuate that change. [ECF No. 262 at 7]. Defendants concede that, based on the Court’s findings after trial, a judgment should issue regarding the inventorship of the ’551 and ’122 patents, and they do not challenge Astellas’ proposed judgment on this issue. [ECF No. 265 at 7].

Accordingly, Astellas’ motion is GRANTED as unopposed as to the inventorship of the ’551 and ’122 patents.

B. Ownership of the '551 and '122 Patents

Astellas also asks the Court to order Defendants to assist with the transfer of the ownership of the '551 and '122 patents because “ownership flows from inventorship.” [ECF No. 262 at 7]. Defendants object to this request because once Drs. Xu and Wang are removed and Drs. Kimbrel and Lanza are added as inventors to the patents, Drs. Kimbrel and Lanza are the ones who may transfer ownership of the patents, so any ruling on this issue is “unnecessary.” [ECF No. 265 at 7–8]. Astellas counters that the ruling is necessary because Defendants’ objection “suggests that Defendants may be unwilling to do any required paperwork to transfer ownership” of the patents. [ECF No. 268 at 5].

“It is elementary that inventorship and ownership are separate issues,” and “the patent right initially vests in the inventor who may then, barring any restrictions to the contrary, transfer that right to another.” Beech Aircraft Corp. v. EDO Corp., 990 F.2d 1237, 1248 (Fed. Cir. 1993). Other than its argument that Defendants may be unwilling to assist in the transfer of ownership, Astellas does not explain what role Defendants would have once Drs. Xu and Wang are removed and only Drs. Kimbrel and Lanza remain as the sole inventors of the patents. Nor has Astellas pointed to any caselaw that shows that courts typically direct a removed inventor to assist with the transfer of ownership. Accordingly, Astellas’ motion with respect to the transfer of ownership of the '551 and '122 patents is DENIED.

C. Inventorship and Ownership of the '551 PCT Application and Patents or Applications Based on It

Astellas argues that because the Court found that Drs. Kimbrel and Lanza are the true inventors of the '551 and '122 patents, it must also order relief regarding the inventorship and ownership of (1) PCT/US2013/048291 (the “'551 PCT application”), to which the '551 patent claims priority; (2) any foreign patents or applications that claim priority to the '551 PCT

application, which include patents issued in China and Canada and a pending application in Hong Kong, [ECF No. 262 at 4, 6–9; ECF No. 274; ECF No. 275]; and (3) any other pending U.S. patent applications that claim priority to the '551 PCT application, which includes U.S. Patent Application No. 16/745,944 (the "'944 application"), [ECF No. 262 at 10–11].

As the Court explained in its findings of fact and conclusions of law, "[a] person who alleges that [he or she] is a co-inventor of the invention claimed in an issued patent who was not listed as an inventor on the patent may bring a cause of action to correct inventorship in a district court under 35 U.S.C. § 256." Vapor Point LLC v. Moorhead, 832 F.3d 1343, 1348 (Fed. Cir. 2016) (quoting Eli Lilly & Co. v. Aradigm Corp., 376 F.3d 1352, 1357 n.1 (Fed. Cir. 2004)), cert. denied sub nom. Nanovapor Fuels Grp., Inc. v. Vapor Point, LLC, 137 S. Ct. 1121 (2017); see 35 U.S.C. § 256 (permitting correction of inventorship "[w]hen . . . through error an inventor is not named in an issued patent"). "Inventorship is a mixed question of law and fact: The overall inventorship determination is a question of law, but it is premised on underlying questions of fact." Eli Lilly, 376 F.3d at 1362. "The determination of whether a person is a joint inventor is fact specific, and no bright-line standard will suffice in every case." Fina Oil & Chem. Co. v. Ewen, 123 F.3d 1466, 1473 (Fed. Cir. 1997).

The underlying theme of Astellas' motion is that the Court has already made the necessary findings to allow Astellas' proposed judgment as to inventorship, and consequently ownership, to issue. [ECF No. 262 at 8–11; ECF No. 268 at 5–11]. Turning first to the '551 PCT application, Astellas argues that any ruling on the '551 patent's inventorship controls the '551 PCT application's inventorship. [ECF No. 262 at 8]. Astellas asserts that Defendants have been on notice since the pleading stage that it would be seeking return of all patents and applications that were based on Astellas' technology and that Defendants have admitted that the

“’551 PCT application is substantively identical to the ’551 patent.” [ECF No. 262 at 8–9; ECF No. 268 at 5–8]. Therefore, according to Astellas, the Court has sufficient evidence to find that it is proper to correct the inventorship of the ’551 PCT application to remove Drs. Wang and Xu and add Drs. Kimbrel and Lanza. Defendants counter that the ’551 PCT application contains 92 claims, many of which disclose subject matter not analyzed by this Court, and thus the Court’s findings of fact and conclusions of law based on an analysis of the 11 claims in the ’551 and ’122 patents cannot control the inventorship of the ’551 PCT application. [ECF No. 265 at 9–11].

The Court acknowledges that Defendants’ trial brief conceded that there are similarities between the ’551 PCT application and the ’551 patent, [ECF No. 221 ¶ 62 n.9], and their corrected proposed findings of fact and conclusions of law stated that “[t]he [’]551 PCT [a]pplication was the basis for the [’]551 national stage and thus had the same specification and figures as the [’]551 patent,” [ECF No. 247-1 ¶ 134]. The Court also recognizes that Astellas’ amended complaint broadly sought “[a]n order that Defendants immediately transfer to [Astellas] all right, title, and interest in all information, patent applications, patents, technology, products, and other materials in the possession, custody, or control of Defendants that wrongfully constitute, contain, were based on, and/or derived in whole or in part from the use of [Astellas’] intellectual property.” [ECF No. 113 ¶ 92(E)]. Astellas does not, however, identify any evidence in the trial record that would allow the Court to now analyze the ’551 PCT application’s 92 claims to determine who is the true inventor of its disclosed subject matter. At most, Astellas has demonstrated that there is some overlap between the ’551 patent and ’551 PCT application’s claims, [ECF No. 268 at 7–8], but Astellas does not offer any response to Defendants’ argument that the ’551 PCT application contains claims relating to additional

subject matter that were never considered by this Court, including claims relating to “methods. . . for the delivery of agents across the blood brain barrier and the blood spinal cord barrier.” [TX 8 at AIRM00293610; ECF No. 265 at 10–11]. As stated in Section II supra: a Rule 52(b) motion is not the time for a party to introduce new evidence and theories, and this Court’s ruling on the motion must be “based on evidence contained in the record.” Fontenot, 791 F.2d at 1219. In the absence of evidence in the record that would allow the Court to undertake a substantive analysis of the dozens of claims in the ’551 PCT application, Astellas’ post-trial attempt to correct its inventorship and ownership must be denied.

As to the foreign patents and pending foreign patent applications that claim priority to the ’551 PCT application, Astellas again asserts that this Court has the power to correct the inventorship and ownership of those patents because the claims are similar to or overlap with the claims in the ’551 and ’122 patents. [ECF No. 268 at 7–8]. The parties’ briefing identifies a Chinese patent (CN104471059), a Canadian patent,¹ and a pending Hong Kong patent application (HK1208054). [ECF No. 265 at 11–12; ECF No. 262 at 4]. Astellas’ argument as to these foreign patents and applications fails for the same reason its arguments regarding the ’551 PCT application fail. Astellas does not point to any evidence in the record that shows that the Chinese patent, the Canadian patent, or the Hong Kong patent application were ever raised at trial. Thus, in the absence of any evidence introduced at trial, it is impossible on the current record to now determine who contributed what to the claims asserted in these foreign patents and applications. The Court also notes that, with regards to the Chinese patent and the Hong Kong

¹ Although the briefing discusses a pending Canadian patent application (CA2876499), in a supplemental letter, Defendants notified the Court that the Canadian Patent Office had issued a Notice of Allowance for ImStem’s Canadian patent application. [ECF No. 274]. Astellas filed a response to that letter, reiterating that the Court could enter a judgment as to that now-issued patent, [ECF No. 275], and Defendants filed a reply, [ECF No. 276].

application, the only copies of those documents currently before the Court have not been translated to English, and thus, even if it were proper to undertake a post-trial analysis of their claims and subject matter, the Court would be unable to do so. [ECF Nos. 265-3, 265-4].

Regarding the pending '944 application, Astellas argues that its claims are identical to the claims in the '551 patent and thus the Court's inventorship findings control that application as well. [ECF No. 268 at 9]. Again, Astellas does not point to any evidence in the record where the '944 application was raised during the trial. While there may be some similarity between the '551 patent's claims and the '944 application's claims, [ECF No. 268 (Astellas' brief identifying similarities and overlap)], they are not identical. For instance, as Defendants note, the '944 application claims "a method. . . dissociating the human embryonic stem cell colony" into "aggregates," [ECF No. 269-1 at 6], while claim 1 of the '551 patent recites the element of "*disaggregating* the hemangio-colony forming cells . . . into single cells," [TX A at AIRM00290410 (emphasis added)]. Therefore, there appears to be at least some dissimilarity between the '551 patent and the '944 application. Perhaps if evidence on the '944 application's claims had been presented at trial, the Court could have conducted a more fulsome analysis of those similarities, but now is not the proper time to raise new legal theories or present additional evidence. Valentín Marrero, 2020 WL 5992019, at *2. Thus, the Court cannot conclude that the inventorship analysis of the '551 patent requires that the inventorship of the '944 application be corrected.²

² The Court also notes that the parties' stipulation that any finding on the '551 patent would apply to the '122 patent suggests that if the parties had other patents or applications that they intended to be controlled by the findings on the '551 patent, they could have reached a similar stipulation as to those patents and applications or would have otherwise known they needed to be raised a trial.

Finally, to the extent Astellas argues that Federal Circuit precedent compels this Court to correct the inventorship of the '551 PCT application and any patents or applications derived from it, [ECF No. 262 at 8], that view is not supported by the case law. In Chou v. Univ. of Chicago, the Federal Circuit considered whether a district court had properly dismissed a complaint that sought correction of inventorship of three U.S. patents and three foreign patent applications that were “based on the subject matter” of the U.S. patents. 254 F.3d 1347, 1353 (Fed. Cir. 2013). The district court found that it lacked jurisdiction over the foreign patent applications, but on remand, the Federal Circuit held that “[s]ince inventorship on [foreign patent] applications normally follows the inventorship designation in the originating country, the district court, if it concludes on remand that [plaintiff] is properly an inventor of the disputed subject matter, *can* instruct the [defendant] to take appropriate action to change the inventorship designation on the foreign patent applications.” Id. at 1360 (emphasis added). Although Astellas appears to imply otherwise, Chou does not mandate that all foreign patents and pending applications derived from a PCT application must follow the inventorship of other patents derived from the PCT application. Instead, Chou only suggests that the Court undertake an analysis of the subject matter of the PCT application and pending foreign applications before making any findings on their inventorship.

Accordingly, to the extent that Astellas’ motion asks the Court to enter judgment ordering that the inventorship of the '551 PCT application and any foreign patents or pending applications that claim priority to the '551 PCT application be corrected and their ownership be transferred, the motion is DENIED.

D. Chapter 93A Claim

As an alternative method to accomplishing its requested relief, Astellas asks the Court to take notice of Defendants' post-trial conduct (including their refusal to return related patents applications), make additional findings, and order that Defendants return Astellas' intellectual property pursuant to Chapter 93A. [ECF No. 262 at 11–12; ECF No. 268 at 11–13]. As noted above, the Court cannot find that the additional relief Astellas requests with regards to the '551 PCT application and other foreign patents and pending applications is warranted because there is insufficient evidence in the record to properly analyze the claims in those patents and applications. Accordingly, there is no basis to reconsider the conclusions of law as to the Chapter 93A claim or to order the equitable relief that Astellas seeks.

IV. CONCLUSION

Accordingly, for the reasons set forth above, Astellas' motion, [ECF No. 261], is GRANTED in part and DENIED in part. A judgment consistent with this Order shall issue.

SO ORDERED.

March 10, 2022

/s/ Allison D. Burroughs
ALLISON D. BURROUGHS
U.S. DISTRICT JUDGE